Tension Control System
XPRO

Warner®
Electric

An Altra Industrial Motion Company

INTRODUCTION:

The XPRO human interface is an optional component to the Warner Electric XCTRL control which is providing to the user an easy way to get access to the PID regulation SetPoint.

It is generally used with Load cells application when the current Tension needs to be changed when running.
It's offering some display screens which could be setup to show some curves or some other data as the current tension, the real time output voltage.
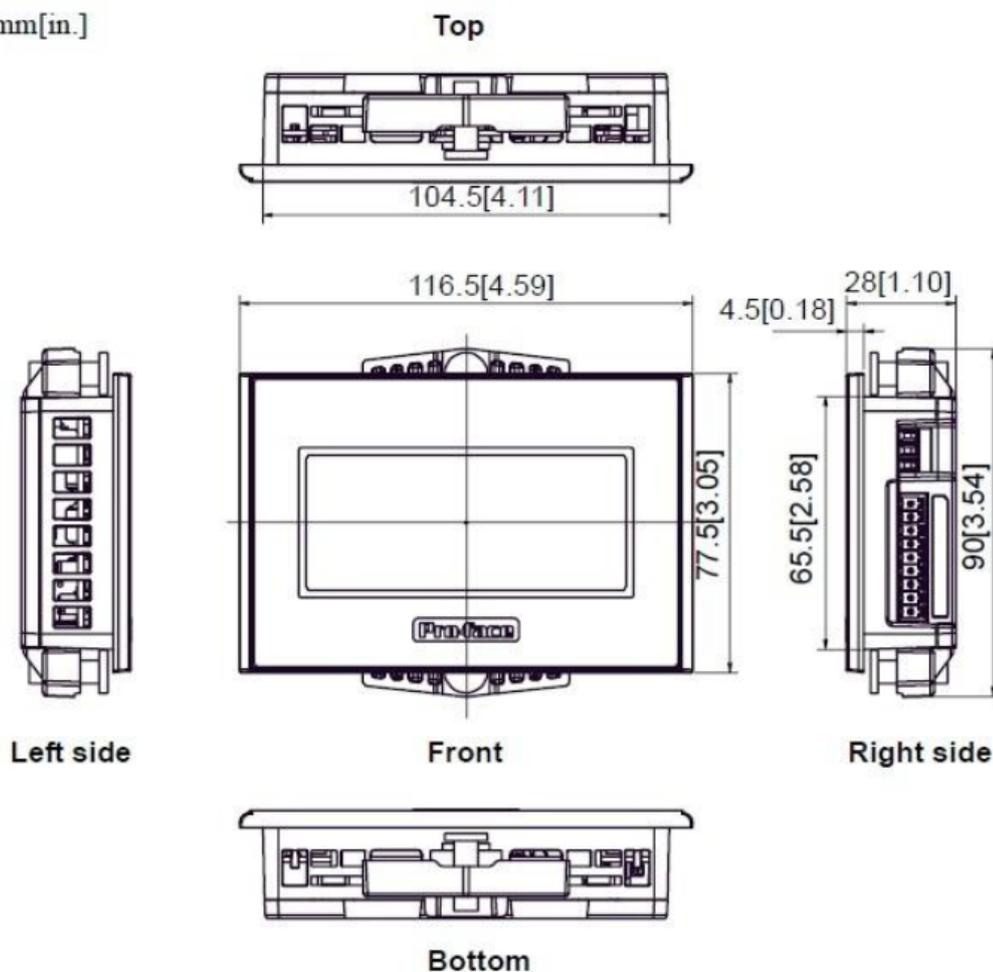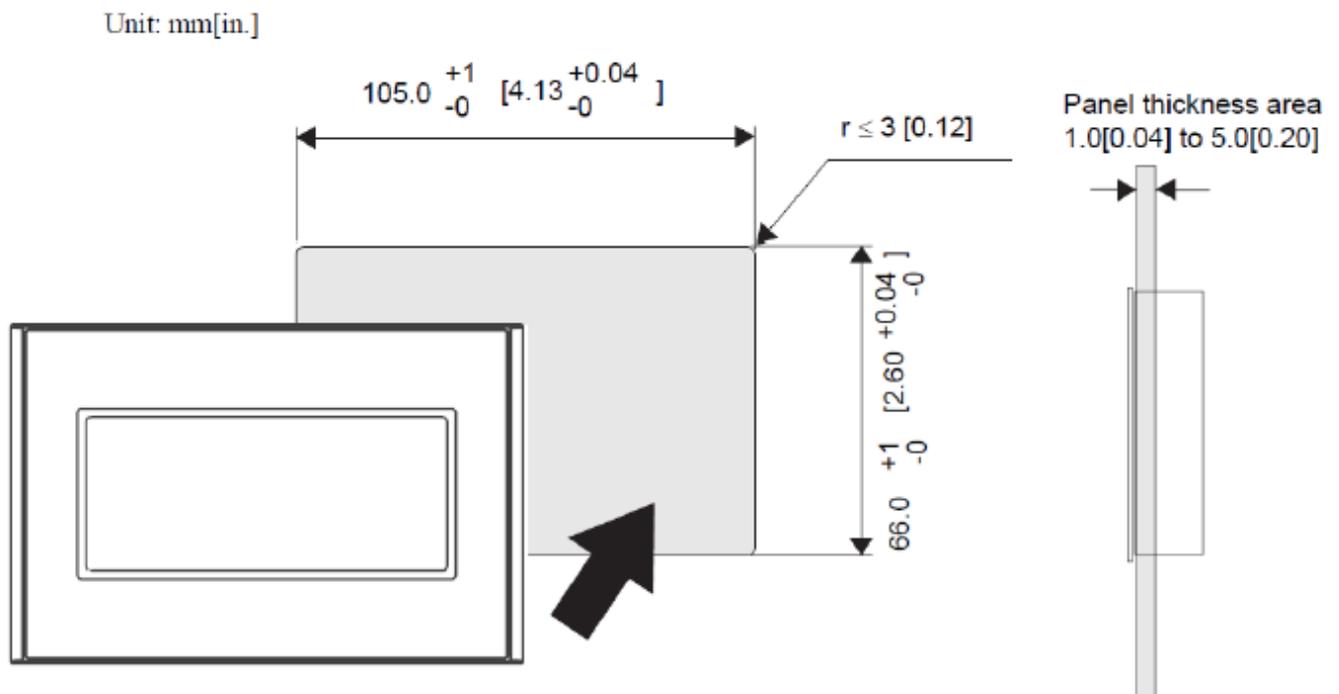
Unit: mm[in.]

Top

104.5[4.11]

116.5[4.59]

4.5[0.18]

28[1.10]

77.5[3.05]

65.5[2.58]

90[3.54]

Left side

Front

Right side

Bottom

Figure 1: XPRO dimensions

RATINGS:

Main Supply Voltage (V)	24V DC +/- 5%
Operating T°C	0 to 50°C no Condensation
Interface	RS232C
Compliance	CE RoHS compliant REACH COMPLIANCE UL

INSTALLING THE XPRO:

Panel Cut Dimensions:

Unit: mm[in.]

$105.0 ^{+1}_{-0}$ [$4.13 ^{+0.04}_{-0}$]

$r \leq 3$ [0.12]

Panel thickness area 1.0[0.04] to 5.0[0.20]

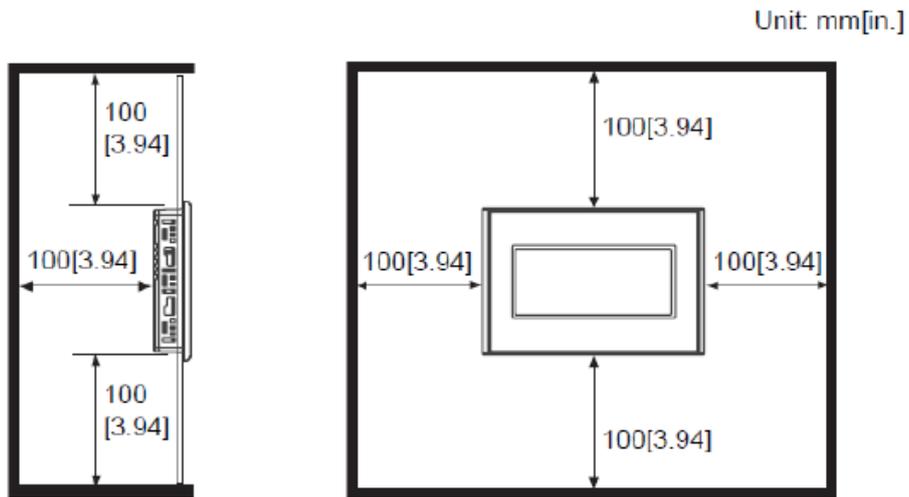$66.0 ^{+1}_{-0}$ [$2.60 ^{+0.04}_{-0}$]

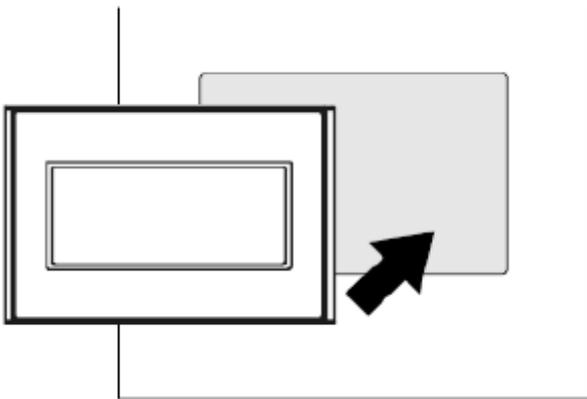## 1. INSTALLATION REQUIREMENTS:

For easier maintenance, operation, and improved ventilation, be sure to install the GP at least 100 mm [3.94 in.] away from adjacent structures and other equipment.

Be sure that the surrounding air temperature and the ambient humidity are within their designated ranges. (Surrounding air temperature: 0 to 50°C, Ambient humidity: 10 to 90%RH, Wet bulb temperature: 39°C max.)
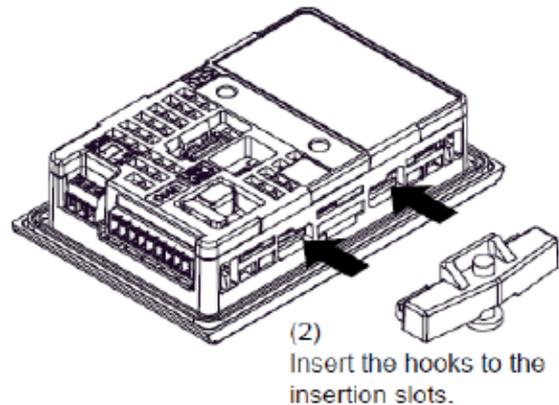
When installing the GP on the panel of a cabinet or enclosure, "Surrounding air temperature" indicates both the panel face and cabinet or enclosure's internal temperature.
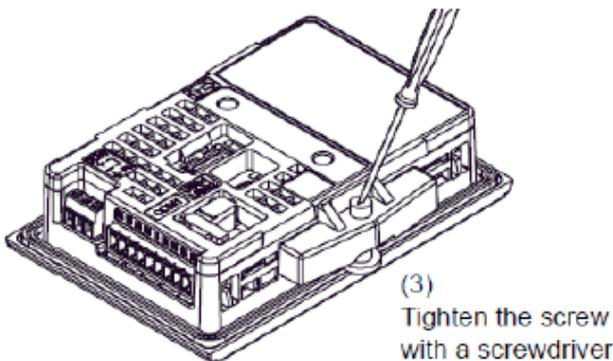
Unit: mm[in.]

1. Insert the GP into the panel cut, as shown.

2. Insert the installation fastener hooks to the insertion slots on the GP unit.

(2)
Insert the hooks to the insertion slots.

3. Tighten the installation fasteners with a screwdriver.

(3)
Tighten the screw with a screwdriver
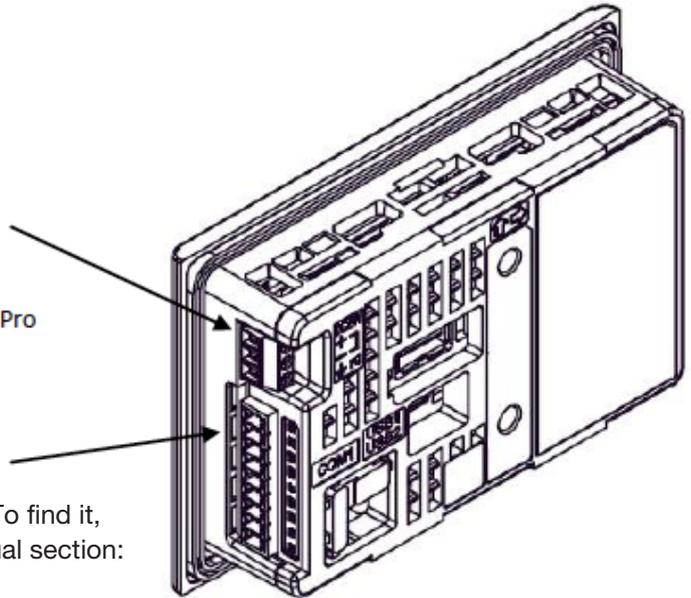
2. CONNECTION TO THE XCTRL CONTROL:

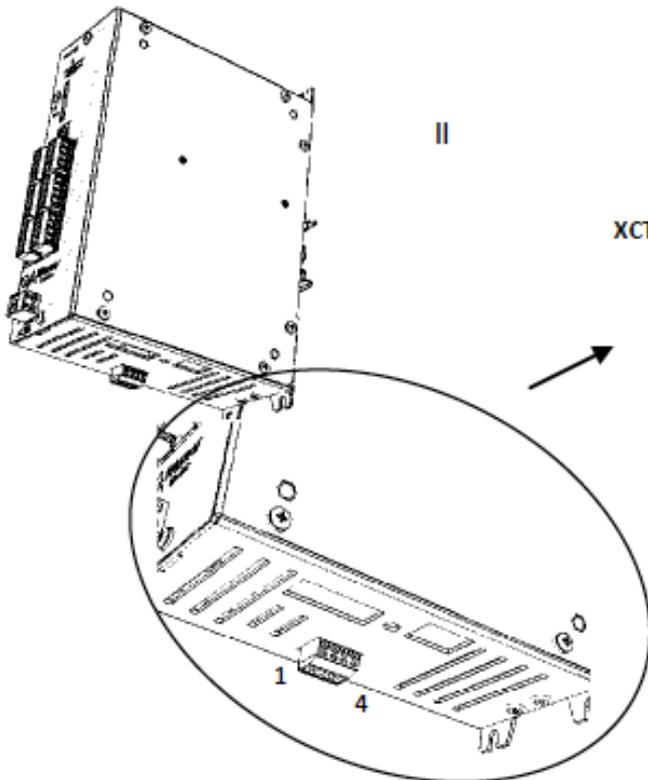**XPRO Serial Connector:**

+ : 24 VDC

- : 0 VDC

FG : Ground terminal connected to the XPro

RS232C Connector
Connected to XCTRL XPRO Interface. To find it, please refer to the XCTRL service manual section: 'Touch Screen Installation and Setting'.

XCTRL			XPro	
1	RX		SD	1
2	TX		RD	2
3	5V		ER	3
4	Gnd		DR	4
			SG	5
			RS	6
			CS	7
			CD	8
			CI	9

3. XPRO SCREENS:

1. Power up screen

The following screen is displayed at power on. With touching the screen, we are directed to the Home screen.
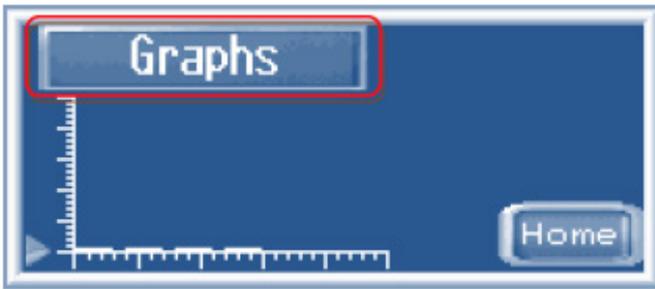The firmware version is also displayed.

2. Home screen

This screen is the main one which allows the user to select what needs to be displayed. The choice can be made between the Setpoint display and change, the Manual outputs forcing, a Graphical display and a Digital display of the main control values.
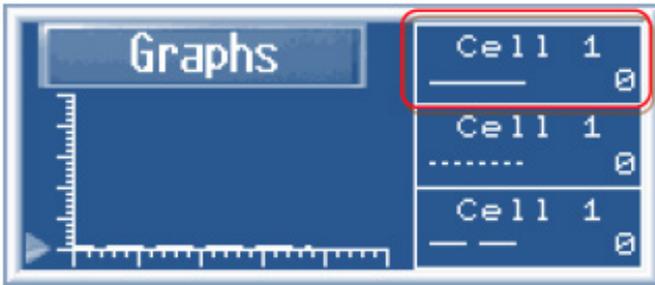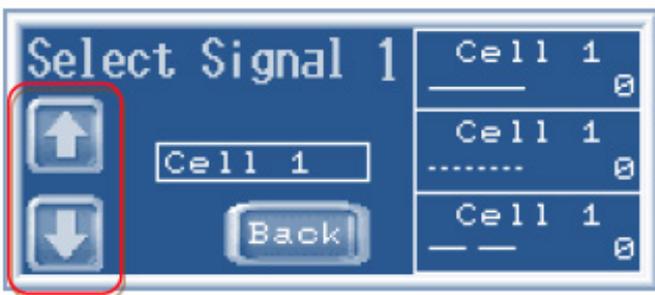
3. Graphical screen

This screen displays all inputs/outputs of the XCTRL control as well as the setpoint.
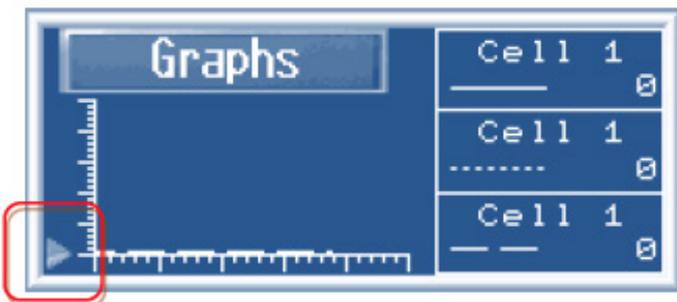

With pressing the Graph's title, you are asked to select the signal you want to display.

With pushing the Cell 1 rectangle, the below screen allows you to make the selection of the desired signal.

With the up or down arrows please select the signal.

If the arrow on the left side of the screen is pressed down, you will be directed to a screen which is dedicated to the Setpoint update.

With pressing the up or down arrows button, you have the choice to select which setpoint will be displayed between Setpoint 1 and Setpoint 2.

4. Set up Setpoint screen

This screen allows you to display and to change the current value of the setpoint. There are actually two ways to change it.
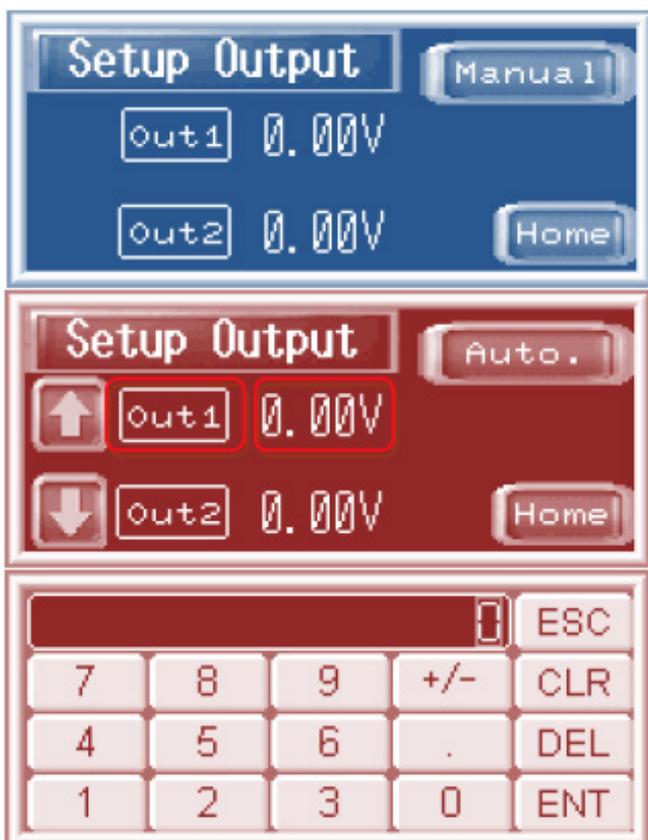

After having selected which setpoint you want to modify, the first way to change the value is to use the up/down arrows to increase/decrease it by one.

The second way is to push the blinking value. It will then display a new screen integrating a digital keyboard with which you will be able to enter directly the required value.

5. Manual screen

This screen is displaying in real time the value of both XCTRL outputs with offering the possibility to force the value.

With pushing on the Manual button, you are entering the forcing screen. The background of the screen is turned Red.
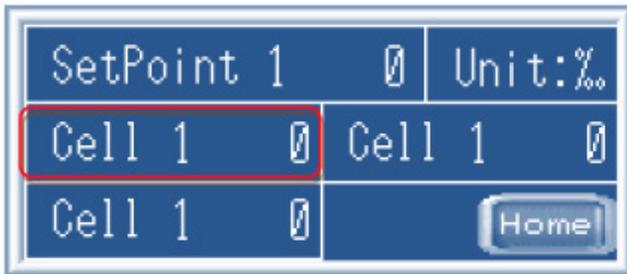

With pressing on Out1/2, one selects the output which needs to be modified.

Like with the Setpoint setting, with pushing on the arrows you can increase or decrease the output value.

With pushing on the value itself, the below screen is popped up to allow you to enter directly the correct value.

6. Values Screen

This screen is aimed to get an overview, at a glance and in real time, of all key values of the control.

To select another value than the one displayed, press on the value you want to change and select the correct one on the screen which has been popped up.

With the arrows, select the desired signal you want to display the value.

4. SERIAL PROTOCOL BETWEEN XPRO AND XCTRL CONTROL

The set of command between XPRO interface and XCTRL control is available. Please contact Warner Electric for more information.

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